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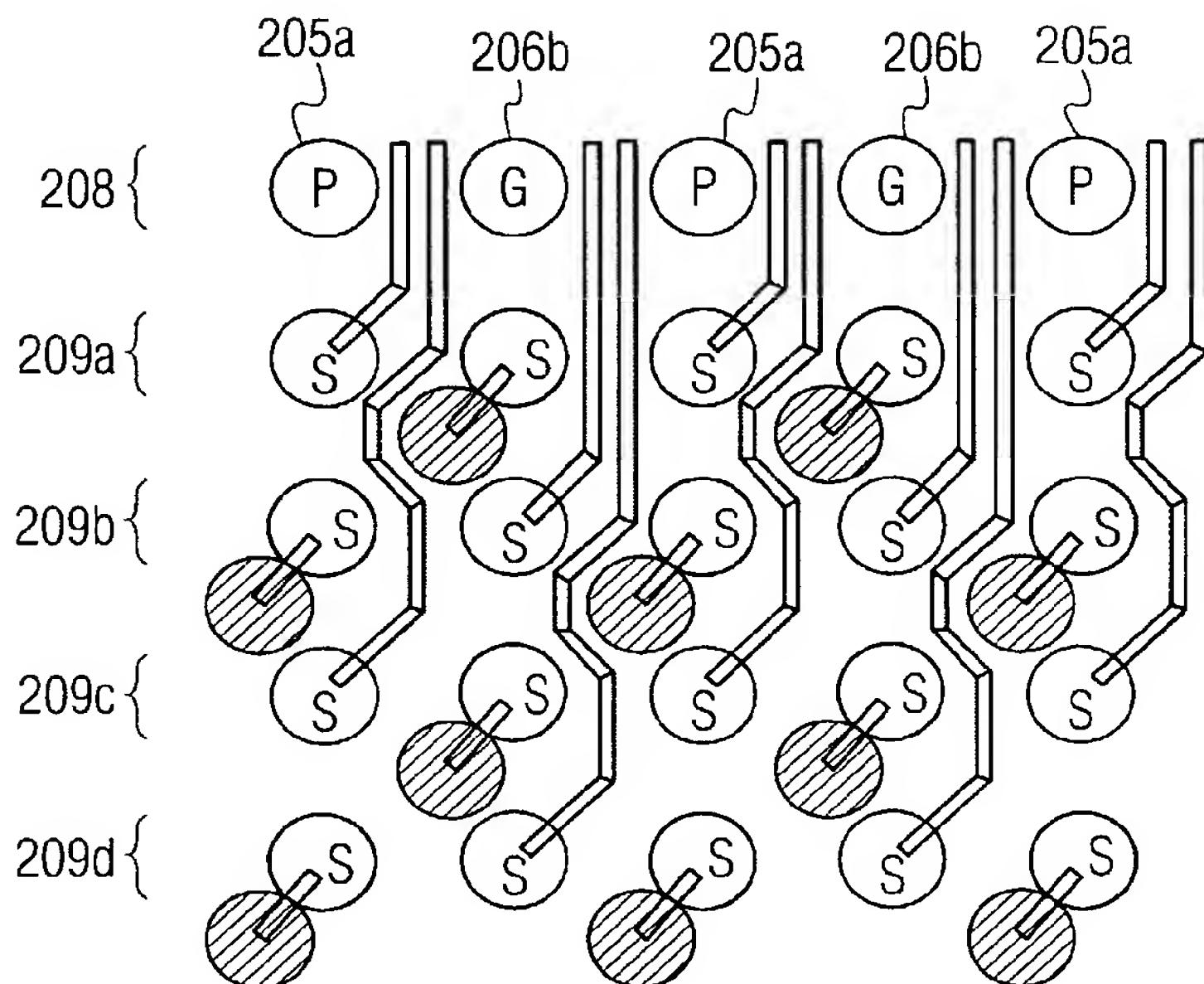
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[Continued on next page]

(54) Title: METHOD FOR INCREASING A ROUTING DENSITY FOR A CIRCUIT BOARD AND SUCH A CIRCUIT BOARD



(57) Abstract: A multi layer circuit board (MPCB) is disclosed that is comprised of a first layer (201) and a fourth layer (204) substantially parallel to the first layer (201). Pluralities of electrical contacts (207aa, 207ca, 207ea, 207bb, 207db, 207ac, 207cc, 207ec, 207bd, 207dd, 207ba, 207da, 207ab, 207cb, 207eb, 207bc, 207dc, 207ad, 207cd, 207ed; 311) are formed on the first layer (201) of the multilayer circuit board and are disposed in a first grid. The plurality of electrical contacts are divided into a first subset (207aa, 207ca, 207ea, 207bb, 207db, 207ac, 207cc, 207ec, 207bd, 207dd) for routing within the first layer (201), and a second subset (207ba, 207da, 207ab, 207cb, 207eb, 207bc, 207dc, 207ad, 207cd, 207ed) for routing within the fourth layer (204). A plurality of vias (210aa, 210ba, 210ab, 210bb, 210bc, 210ac, 210bc, 210ad, 210bd, 210cd; 310) are formed between the first layer (201) and fourth layer (204) and each disposed adjacent at least one of the second subset (207ba, 207da, 207ab, 207cb, 207eb, 207bc, 207dc, 207ad, 207cd, 207ed) of the

plurality of electrical contacts, the plurality of vias (210aa, 210ba, 210ab, 210bb, 210bc, 210ac, 210bc, 210ad, 210bd, 210cd; 310) having a spacing between each pair thereof larger than a smallest spacing between adjacent electrical contacts off the plurality of electrical contacts (207aa, 207ca, 207ea, 207bb, 207db, 207ac, 207cc, 207ec, 207bd, 207dd, 207ba, 207da, 207ab, 207cb, 207eb, 207bc, 207dc, 207ad, 207cd, 207ed; 311).

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